

# NEWSLINE

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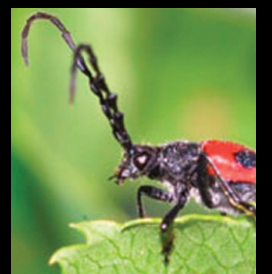
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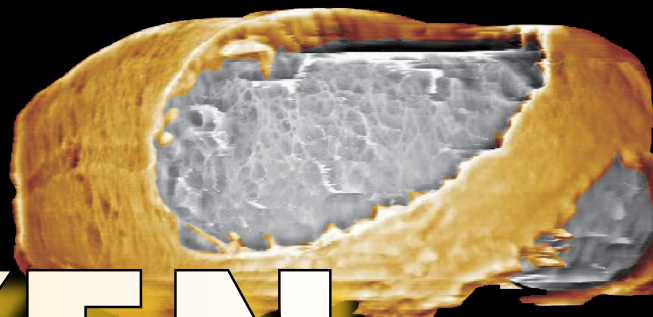
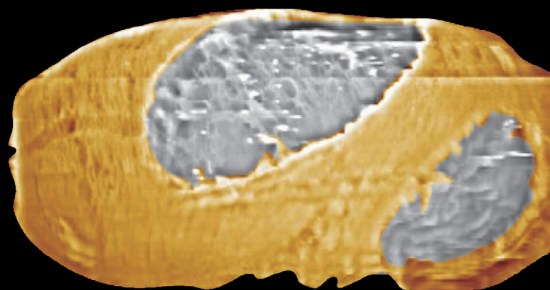
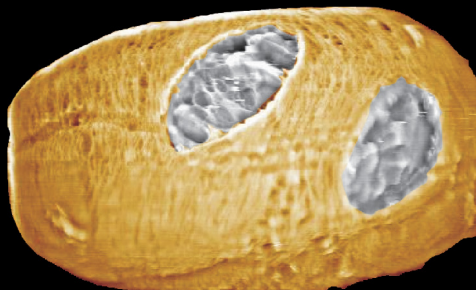
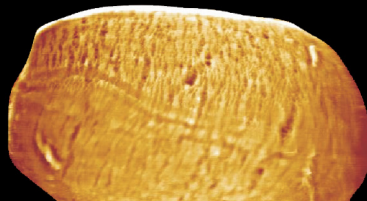
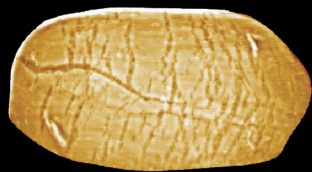
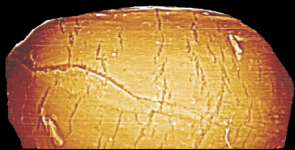
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## TRANSITION NEWS



## Putting the priority on people, the key to the Laboratory's success

It was one month ago today (May 8) that the Department of Energy announced that Lawrence Livermore National Security, LLC (LLNS) had won the contract to manage our Laboratory, effective Oct. 1. Both LLNS and our own transition team have accomplished a great deal in this one-month period. Approximately 60 external individuals are now on site assisting in the transition. Specific accomplishments over this past week include finalizing a formal communication plan for how LLNS, LSO and LLNL plan to work together on communications, the delivery of the LLNS benefit proposal to LSO and tours of the Laboratory for both key personnel and transition support team members.

Starting next week and through the end of June, each LLNS principal associate director will hold a "town hall" meeting to discuss his or her vision of the organization and the management structure. It also will be an opportunity for each PAD to answer questions from all Laboratory employees and to gather additional input. A specific schedule for the town hall meetings is included in this edition of *Newsline* and I would encourage all employees to attend as many meetings as possible. We will broadcast all town hall meetings live on Lab TV Channel 2. Be sure to check *NewsOnLine* each week for the exact schedule of the additional auditoriums that



### A MESSAGE TO EMPLOYEES

— Barbara Peterson

will be available for these meetings. We also will rebroadcast all meetings on Laboratory television and make them available to you in Quicktime video format on our transition Web page.

The desire to speak with all employees via the town hall meeting process is part of the "People" phase of LLNS contract transition. In today's *Newsline* and on the Lab's transition Website, you will see an updated timeline that features the People, Places and Processes theme LLNS is using to execute transition. Over the next two months (June and July) most of the LLNS and Lab transition effort will focus on employees — our people. This will include everything from colleague-level briefings and the rollout of the PAD organization charts and management structure to communication of the proposed benefits package and your opportunity to provide

official comment to NNSA. These activities will be followed by the roll-out of the final approved benefits plan, the completion of the mapping process and employees receipt of job offer letters slated for mid-July. Employees will be given approximately 60 days to review their benefits options and accept their offer.

In late July, early August, a second, simultaneous phase of transition will begin, focusing on "Places" — or facility walk-throughs and our state of readiness to transfer responsibilities for operating and managing buildings and key facilities to LLNS. Our Lab will support LLNS on facility condition assessments, inventories and other activities to document existing conditions at the Lab. As part of this assessment, you might see individuals walking around the Laboratory and touring facilities. The "People" phase will continue with opportunities for you and your family to ask questions and make informed decisions. A third phase of transition, "Processes," will begin in August, and continue in September as LLNS reviews our Laboratory procedures and official practices.

The theme of People, Places, and Process is an easy way for all of us to think about transition for the next four months. And the priority, rightly so, will be on people — our employees, a key strength of our Laboratory.

## LLNS Board of Governors provides a broad range of expertise

Lawrence Livermore National Security, LLC (LLNS) on Thursday announced its board of governors, a group of outstanding scientific, academic, national security and business leaders from across the nation.

LLNS' management team includes Bechtel, the University of California, BWX Technologies, Washington Group and Battelle. The Department of Energy/National Nuclear Security Administration selected LLNS in early May to manage and operate the Laboratory beginning Oct 1. George Miller, the current Laboratory director, is the LLNS president and will remain director Oct. 1.

"This is an engaged board of governors who are proven leaders with expertise that will take Lawrence Livermore far into the future," said LLNS Board of Governors Chairman Gerald Parsky. "We have assembled a team of experts in scientific research and development, business management and operations, national security and nuclear safety to provide the best support to the Laboratory, our LLNS president and his team."

Tom Hash, president of Bechtel Systems



Tom Hash

and Infrastructure, will serve as vice chair of the board.

"This board will help ensure LLNS delivers the best combination of scientific and business management expertise," Hash said.

In addition to Parsky and Hash, the LLNS board's executive committee currently



Gerald Parsky

includes Bruce Darling, executive vice president for university affairs, University of California; and Preston Rahe, president of Washington Group International Inc.'s Energy and Environment; and Craig Weaver, executive vice president of Bechtel Systems and Infrastructure Inc.

There also are six advisory board members: William Madia, vice president for Batelle's Laboratory Operations Market Sector; William Perry, former Secretary of Defense and a senior fellow at the Hoover Institution; Nicholas Moore, former chairman of Price Waterhouse Coopers; Richard Mies, retired admiral and former commander of the U.S. Strategic Command and of Science Applications International Corporation; Sidney Drell, Stanford University professor of physics emeritus and a senior fellow at the Hoover Institution; and John Gordon, first administrator of the National Nuclear Security Administration, U.S. Air Force retired general and former member of the National Security Council.

Members will serve on seven committees — Mission, Science & Technology, Nuclear Weapons Complex Integration, Business & Operations, Ethics & Audit, Nominations & Compensation and Safeguards & Security.

For more information and to view the LLNS Board of Governors biographical sketches, go to the LLNS Website, [www.llnslc.com](http://www.llnslc.com)



TRANSITION NEWS



Getting to know the Lab

Members of the LLNS team took tours earlier this week to familiarize themselves with such Laboratory facilities as the National Ignition Facility (NIF) and the National Atmospheric Release Advisory Center (NARAC), as well as Bldg. 316, which will serve as their onsite home for the duration of transition.

At left, guide Don Bartel leads LLNS team members through NIF. The tours offered an overview of core Laboratory programs and experimental facilities.

JACQUELINE MCBRIDE/NEWSLINE

Transition focus: People, places and processes

As promised in his recent town hall meeting, Lawrence Livermore National Security, LLC (LLNS) President George Miller is rolling out a series of principal associate director “town hall” meetings, to familiarize employees with each of the key areas once the LLNS full contract assumption takes place.

All town hall meetings will be held in the Bldg 123 auditorium and will be carried live on Lab TV Channel 2. The first takes place Tuesday, June 12, at 1:30 p.m. when Principal Associate Director designate Frank Russo discusses Operations and Business. The meeting also will be broadcast in the auditoriums of Bldgs. 155, 381, 481 and 482.

“As I said in my town hall meeting, the LLNS management team wants your input into building this organization,” Miller said. “This is your chance to come hear about each mission area, and provide your input. Together we can take this Laboratory into the future to serve this great country of ours.”

Miller will kick off each meeting by introducing the principal associate director, or PAD. The PAD will discuss his or her area, its organization and structure, management philosophy and approach, and then introduce the key management selected to date within that area. Each presentation will be followed by a question and answer session.

The PAD town hall rollout is part of a three-pronged transition process, marked by phases of “People, Places and Processes.” The “People” phase will be a time for taking

input from employees and answering questions on the gamut of transition topics; “Places” will be marked by facility walk-throughs and other efforts to assess the state of the Lab’s facilities; while the “Processes” phase will review, endorse or offer a change process for LLNL policies and procedures for LLNS use beginning Oct. 1. More information on these processes will be posted on the LLNL Transition Website, [transition.llnl.gov/home](http://transition.llnl.gov/home).

PAD town hall meetings will be held over the next three weeks, concluding with a Director’s Office town hall on June 28. The complete schedule is listed in the box below.

All town hall meetings will be rebroadcast on Lab TV or available for viewing on the LLNL Transition Website, [transition.llnl.gov/home](http://transition.llnl.gov/home). A schedule of TV rebroadcasts will be made available in future editions of *Newsline* and *NewsOnLine*.

UPCOMING TOWN HALL MEETINGS

- June 12 – Operations and Business, with Frank Russo, 1:30 p.m.
- June 19 – Weapons and Complex Integration, with Bruce Goodwin, 1:30 p.m.
- June 21 – Global Security, with John Doesburg, 1:30 p.m.
- June 26 – Science and Technology, with Cherry Murray, 10 a.m.
- June 26 – National Ignition Facility and Photon Science, with Ed Moses, 11 a.m.
- June 28 – Director’s Office, with George Miller, 1:30 p.m.

2007 CONTRACT TIMELINE

MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
Contract awarded to LLNS	LLNS town hall meetings	Mid July: LLNL employees receive job offer letters	Facility walk-throughs begin	Lab policies and procedures formally reviewed	New LLNL contract begins.
Transition planning begins	Mapping process begins			Current LLNL contract expires	
	Benefit planning under way				

PEOPLE

PLACES

PROCESSES



# SCIENCE NEWS

## Study lends new insight to spore-borne diseases

By Anne M. Stark  
Newsline staff writer

Tapping into the unknown world of awakening dormant bacterial spores, researchers have revealed through atomic force microscopy (AFM) the alterations of the spore coat and germ cell wall that accompany the transformation from a spore to a vegetative cell.

When starved of nutrients *Bacillus* (rod-shaped bacteria) cells initiate a series of genetic, biochemical and structural events that result in the formation of metabolically dormant spores. They can remain dormant for extended periods and, partly because of their tough spore coat, have a significant resistance to extreme environmental factors including heat, radiation and toxic chemicals. However, once in favorable conditions, spores break the dormant state through germination and reenter the vegetative mode of replication.

Although significant progress has been made in understanding the biochemical and genetic bases of the spore germination process, it is still unclear how a spore breaks out of its dormant state.

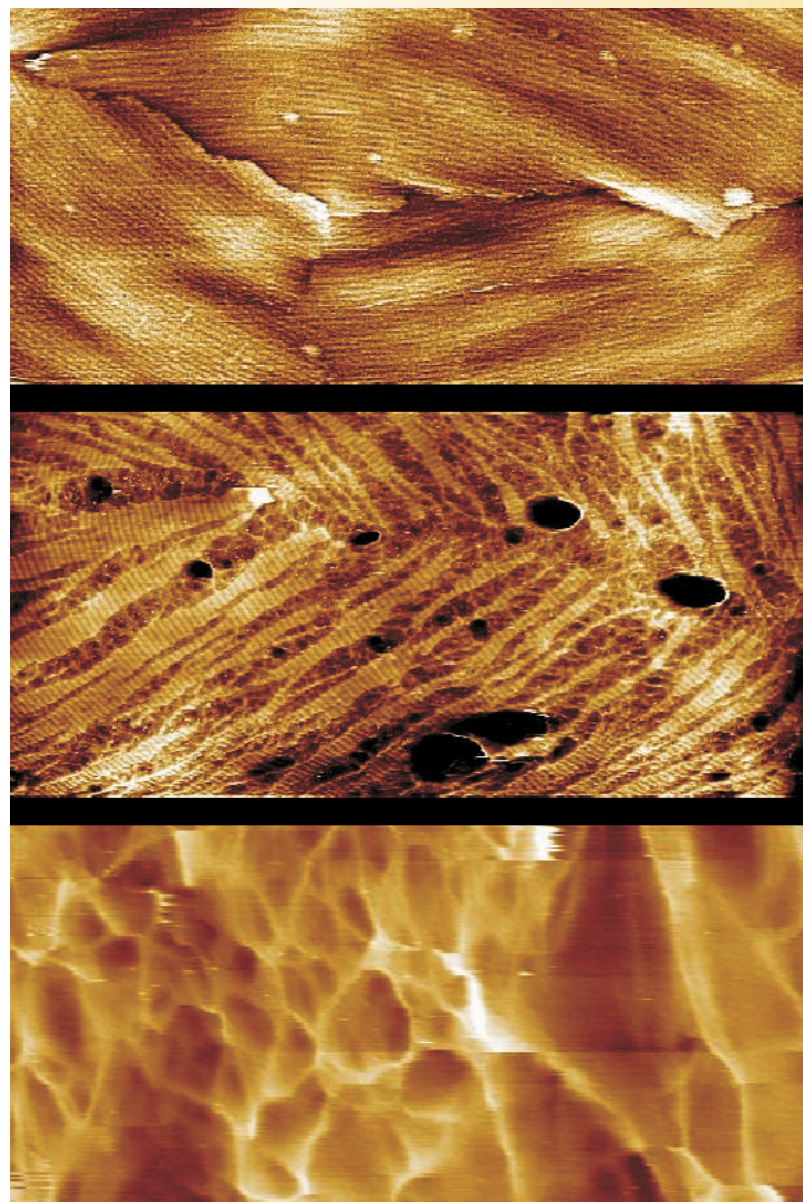
But a new in vitro study of single germinating *Bacillus atrophaeus* spores details how the spore coat structures break down, and it shows with unprecedented resolution how the new bacterium emerges from the disintegrating spore. The new research, led by Laboratory scientists, appears in the May 28-June 1 early online edition of the *Proceedings of the National Academy of Sciences*. The research appears in this week's (June 4) issue of *PNAS*.

"A thorough understanding of spore germination is important for the development of new countermeasures that identify the earliest stages of a wide range of spore mediated diseases, including botulism, gas gangrene and pulmonary anthrax," said Alexander Malkin, senior author from LLNL's Biosciences and Biotechnology Division. "But it's also important to gain fundamental insights into the key events in bacterial cell development."

The researchers, including Marco Plomp, lead author at LLNL, and those from Children's Hospital Oakland Research Institute and Northwestern University, used AFM to identify disassembly of the outer spore coat rodlet structures, which appear to be structurally similar to amyloid fibrils that have been associated with neural degenerative diseases, such as Alzheimer's and prion diseases. "The extreme physical and chemical resistance of *Bacillus* spores suggests that evolutionary forces have captured the mechanical rigidity and resistance of these amyloid self-assembling biomaterials to structure the protective outer spore surface," Plomp said.

When exposed to a solution that triggers germination, nanometer sized etch pits were seen developing in the rodlet layer. These etch pits evolved into ever widening fissures, leaving narrow strips of remaining rodlet structure. In the end, 1- to 3- nm-wide fibrils remained. The in vitro AFM imaging also revealed the porous fibrous cell wall structure of newly emerging and mature vegetative cells, consisting of a network of nanometer-wide peptidoglycan fibers. "These results show that dynamic AFM is a promising tool to investigate the formation and evolution of the bacterial cell wall," Malkin said.

The research is funded by LLNL's Laboratory Directed Research and Development program, the Defense Advanced Research Project Agency (DARPA) and the Federal Bureau of Investigation.



Atomic force microscope (AFM) images of the rodlet layer of an intact spore (top), a degrading rodlet layer during germination (middle) and the cell wall structure of the newly emerging vegetative cell (bottom)

On the cover: Series of dynamic in vitro atomic force microscopy images of a germinating *Bacillus atrophaeus* spore. Initially, the rodlet layer that covers the spore coat (colored in red) degrades by formation and expansion of fissures. Later in germination, increasing apertures evolving in the spore coat dilate and merge, thereby uncovering the peptidoglycan cell wall of the emerging vegetative cell (grey).

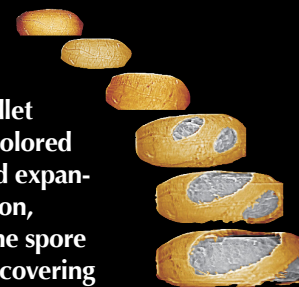


IMAGE COURTESY OF MARCO PLOMP AND ALEXANDER J. MALKIN (LAWRENCE LIVERMORE NATIONAL LABORATORY).



# Colloquium provides perspective on homeland security

*By Lauren de Vore  
Newsline staff writer*

In the glow of 20-20 hindsight, the Cold War looks almost comforting. So noted Vic Alessi, president and chief executive officer of United States Industry Coalition and chairman of the Directorate Review Committee for the Nonproliferation, Homeland and International Security (NHI) directorate, at an NHI colloquium last Thursday.

“You knew your adversary then, you could count the missiles,” said Alessi. “Today’s world is very different. Army-against-army war may no longer be the norm. How do you deter an adversary that embraces mass casualties and suicide?”

Alessi and the other members of the NHI Directorate Review Committee participated in a panel discussion during their last review meeting under the University of California contract.

“Twice a year for 15 years, the committee has met to review the Laboratory’s nonproliferation and counterterrorism program,” said Ray Juzaitis, associate director for NHI, as he opened the colloquium. “They have provided essential review and critique of our existing activities and new initiatives as well as invaluable advice and insight regarding new opportunities and the ins and outs of our various sponsor agencies.”

Joining Alessi in sharing their perspectives on the global nonproliferation-counterterrorism

landscape were: Bob Beaudet, professor of chemistry, University of Southern California; Bob Burnett, a former executive vice president of TRW; Bill Frazer, UC representative; John Gordon, a former administrator of the National Nuclear Security Administration; Raymond Jeanloz, professor of earth and planetary science, UC Berkeley; Darrell Long, professor of computer science, UC Santa Cruz; Michael Nacht, dean of the Goldman School of Public Policy, UC Berkeley; Per Peterson, professor of nuclear engineering, UC Berkeley; Bill Schneider, chairman of the Defense Sciences Board; Jeremiah Sullivan, professor of physics, University of Illinois, Urbana-Champaign; and Peter Weinberger, Google.

Schneider observed that “the decline in technical competence in government makes LLNL’s work all the more important. The Lab is well suited to contribute, and you have much more that you could contribute.”

Speaking from the UC perspective, Frazer observed that even though the UC contract is ending, the university is “still committed to ensuring UC’s continued association with the Lab.” He noted that the quality of the Lab’s S&T is “superb and something UC is committed to preserving.”

Burnett, the longest-serving member of the committee (since 1992) and its first chairman, highlighted LLNL’s ability to be an honest broker. “This gives you special credibility, something that

you don’t ever want to lose.”

As one of the newer committee members, Peterson looked ahead, observing that energy will be critical in the future. “There clearly will be a significant expansion of nuclear power worldwide and most of us are thinking about proliferation issues. But we also need to think about the domestic energy situation. We need to think creatively, with innovation, and design systems and infrastructures that address both nonproliferation and energy security.”

Long, another new committee member, applauded LLNL’s penchant for working the hardest problems. “You take really smart people and put them to work on the most important problems. This reminds me of Silicon Valley—someone has a great idea and they get together with their friends and make something really neat and new...and get rich and buy jets...” On a more serious note, “the Lab has been very prescient in recognizing problems and doing something about them before others are even aware of the issue.”

Even as the panel members offered their unique perspectives on the challenges facing NHI and the Laboratory, they were unanimous in their conviction that opportunities abound and LLNL will continue to play a vital role in ensuring the nation’s security.

“I have grandchildren,” Nacht said. “Their future security is in your hands.”

## Lab’s National Security Office gets view of life at weapons facilities

*By David Schwoegler  
Newsline staff writer*

“Only the Best Go North” is the unofficial slogan of Minot Air Force base. Located in northern North Dakota, roughly 40 miles from the Canadian border, Minot is home to the 91st Space Wing and the 5th Bomb Wing.

Lt. Col. Robert Payne Jr., the Chief of Standardization and Evaluation for the Operations Group in the 91st Space Wing — and a former Air Force fellow at Livermore — hosted 10 Laboratory physicists and engineers at the base in early May. Ed Turano of the Lab’s National Security Office had organized the visit for members from Livermore’s ICBM, use control, RRW and nonproliferation teams.

The 91st Space Wing is one of three operational intercontinental ballistic missile units. Nicknamed the “Rough Riders,” they are responsible for defending the United States by maintaining a fleet of 150 Minuteman III missiles located in underground launch facilities scattered across the northwest part of North Dakota.

The 5th Bomb Wing, nicknamed the “Warbirds,” is responsible for a fleet of B-52H Stratofortresses serving both conventional and strategic combat roles.

The Livermore contingent spent three days at the base: one at the weapons storage and



maintenance area; one at a missile alert facility/launch control center, where they turn the keys to launch the ICBMs; and one at a launch facility, a missile silo.

Before the trip, some had criticized the agenda as too light. But nothing could have been further from the truth. The intent was not merely to rush through the facilities. The desire was to spend time in conversation with the people who actually operate, maintain and secure the weapons and facilities. The ultimate goal was a better understanding of the operational side of the nuclear business, so upon the return to Livermore, what had been learned could be integrated into a safer, more secure and more maintainable nuclear deterrent.

The hours flew by, with the group engrossed in detailed conversations at every facility. Base personnel were surprised with just how much the Lab folks knew, how interested they were to hear

about base concerns and points of view, and how motivated they were to find technical solutions to enable change for the better.

Base personnel were equally excited about the Laboratory’s presence. During the visit Turano briefed the operators and maintainers on the technical and historical aspects of nuclear weapons in four hour-long sessions, all of which ran over time because of the audiences’ enthusiasm and interest.

Their jobs are not easy, especially considering the adverse weather conditions in the northern plains, the requirement for constant vigilance, and the long periods they spend away from their families—not to mention the mosquitoes. Base staff are an outstanding group of intelligent, professional, and dedicated men and women. Americans should feel honored they would dedicate their lives to protect and defend the liberties of our nation, according to Turano.

“I think we impressed them equally with our knowledge of science and engineering, and our own dedication to the nations defenses. It’s been a long time since a large Livermore group has been to an operational ICBM and bomber base. It’s as though we finally met our long lost brethren—the sense of mutual respect was palpable and, at times, overwhelming,” Turano said.

i.want ads

Due to the high quantity of ads and space limitations, these want ads have been abbreviated.  
For the complete ad listings, refer to the internal Website: <http://www-r.llnl.gov/pao/news/ wantads.html> or for the latest pdf download and retiree information, see the external Website: <http://www.llnl.gov/pao/employee/>. Please note that these ads appear on the Web.

**Date of ads: Approx. May 29 to June 5. Ads appear on the Web for seven days.**

<div><div><div>AUTOMOBILES</div><div>Subaru Outback, \$3,500, dark green, AWD, automatic, 2.5L engine, 154K miles and runs well 925-443-1744</div><div>1996 Chevy Blazer, \$2,300, good condition, black, 4 door, 2WD, Vortec V6 190hp, 215k mi 209-835-5851</div><div>1997 Plymouth Breeze, \$4000, 71,000 miles. Good condition. 925-454-1518</div><div>2000 Subaru Impreza, 2.5 RS, \$9,990, Very fast, 56K miles. Retiring and moving - must sell! 925-371- 1854</div><div>2000 Subaru Outback, \$8,990, Limited Edition. Excellent condition, original owner, 925-371-1854</div><div>2001 BMW 325ci, \$15,500, 77K miles, excellent condition,selling to send son to college. 525-4210</div><div>2001 Volkswagen Jetta. \$7,000, very clean, black with a 1.8L turbo engine and 5-speed manual 925-513-3995</div><div>2002 GLX Passat, \$13,000, excellent condition in and out. Runs great. Top of the line- 6 cyl. 925-518-8218</div><div>2002 GMC Yukon XL, \$15,700, OBO, royal blue exterior and gray interior with 20 inch rims. 925-783-0473</div><div>2003 Dodge Dakota Quad, \$10,500, 69k V8 Magnum 4.7 liter, automatic 2WD 925-784-0633</div><div>2003 GMC Sonoma extended cab pickup, \$9,800, 65,000 Mi. V6 auto, A/C, power windows, 925-373-1522</div><div>2004 Honda Pilot, \$15,000, leather, power locks, windows, seats etc. heated seats, 209-239-2639</div><div>2005 Chevrolet Equinox, \$15,800. Mileage: 26K (10K left on factory warranty). 209-599-0922</div><div>PT Cruiser chrome wheels, \$200 each. (3). (New from dealer \$530 each). Excellent condition. 209-951-0115</div></div><div><div><div>BICYCLES</div><div>Schwinn bicycle, \$30, Frontier men's 26" black, multiple speed, not used much, good condition 925-443-7531</div></div></div><div><div><div>BOATS</div><div>2005 Reinell power boat, mint condition, \$24,000 OBO. Like new. (White &amp; Blue). 925-584-1612</div><div>2005 Sanger boat, V215 \$37,000 25 engine hours 21' 6" black scorpion, tower, tower speakers, 925-373-3312</div><div>Paddle boat, \$450 OBO. seats five, has adjustable seat backs, 3 bow canopy, 925-516-8925</div></div><div><div><div>ELECTRONIC EQUIPMENT</div><div>Flat screen TV, DVD surround sound, \$300 OBO. Sharp 27" Panasonic 925-846-3653</div><div>Stereo cabinet, \$20, Hitachi. Glass front door, glass top, cherry wood finish. 925-964-0534</div><div>Video equip: \$30. RCA satellite dish and receiver. Used. 925-422-5810</div></div><div><div><div>GIVEAWAY</div><div>Conn Prelude electric organ, spinet. All buttons, switches, and pedals work. Free, you haul. 209-601-2962</div><div>National Geographic magazines from</div></div></div></div></div></div>	<div><div><div>the 1970s and 1980s. Free. 925-215-1618</div><div>Patio screen door. Sliding aluminum, 36 inches wide, white, never used. 925-443-9052</div><div>Twin trundle. Collapsible unit in good used condition, great for summer guests. You haul. 925-455-4666</div><div>Weight bench. Free.. Will deliver if in Livermore. 925-606-9402</div><div>Light wood veneer, two drawer desk. Roughly 4' x 2'. Free for the taking. 925-294-5783</div></div><div><div><div>HOUSEHOLD</div><div>Art deco cedar hope chest \$175 Lane trunk vintage, circa 1940s 925-447-3496</div><div>Brass head board. \$100 OBO King size 373-1522</div><div>Cal King Mattress \$200. obo . Serta Grand Sonata brand. 925-443-8354</div><div>Dining set, \$500, Glass and travertine set with six chairs and side table. 925-606-9402</div><div>Dishwasher \$200 OBO. Maytag Jetclean II quiet series [EnergyStar] white, excellent condition. 510-792-1538</div><div>Entertainment center, \$150 OBO. Honey maple color. 510-792-1538</div><div>Kenmore washer, \$125, extra capacity, and Westinghouse dryer, ex. cond. 925-292-1166</div><div>Fully furnished doll house, \$30. Three story with full set of furniture. 925-606-9781</div><div>Hot water heater. \$100, propane, less than 2 yrs old, excellent condition. 925-447-7255</div><div>Murphy bed, \$650. Custom, nearly-new, solid oak full-sized. 925-918-1059</div><div>Recliner, \$200 OBO. Fabric in medium brown tone has heat and vibrating function, 510-792-1538</div><div>Recliner chairs, \$200 each. Two recliner chairs made by Lane. Solid forest green 925-606-7422</div><div>Small three-shelf bookcase \$10 (~27" wide x 36" high) black wood. 925-413-2595</div><div>Solid oak bedroom set. \$495 OBO. Twin size, set includes trundle bed, 2 mattresses, bookcase headboard and armoire. 925-243-9123</div><div>Wall oven \$165 OBO. Whirlpool 27-inch electric, self-cleaning, black, 925-855-1314</div><div>Washer/dryer \$100. Maytag washer &amp; Kenmore 70 series gas dryer. \$75 for washer, \$25 for dryer. 925-443-3883</div></div><div><div><div>MISCELLANEOUS</div><div>10 Karat gold hoop earrings, \$30, 1" oval. Brand new in box - never worn. 925-648-0671</div><div>2 baby bouncy seats, \$8. 925-371-0585</div><div>2 tks Police concert: June 13. \$275/ each. Oakland, 6/13, FLD 14, Row 19, face value 209-830-0550.</div><div>Baby items \$20-40. Several items including infant swing, strollers, high chair, baby walker, car seats, crib</div></div></div></div></div>	<div><div><div>mattress, 925-373-6833</div><div>Baseball tickets, \$36 each, Oakland As vs Seattle Mariners, on Friday, July 6, or Saturday, July 7 925-449-5481</div><div>Children's play eqpmt. \$40. Children's backyard play set, also toys, videos 925-447-1554</div><div>Drafting table, \$25 OBO. 925-606-4365</div><div>Garden cultivator. \$50, Mantis; needs some work. 925-735-6002</div><div>Giant gumball machine, \$475 OBO. 925-516-8925</div><div>Graco SnuggleRide snap-in car seat, stroller &amp; 3 bases. \$75. 925-371-0585</div><div>Misc baby items: Large selection of boys Quicksilver clothes: 3T (jackets, pants, T-shirts, long-sleeve shirts). I also have an Eliptical and bike trailer. SlingRider , Move-and-go music mirror, and much more 209-918-1298</div><div>Polaris pool sweep \$100/obo, new backup valve and floats, small pool vacuum 373-1522</div><div>Senca nails \$25. 3K in box 925-735-6002</div><div>Shopsmith Mark V, \$3,500, a four-in-one machine that includes a table saw, drill press, lathe, and other accessories. 925-373-6833</div><div>Soccer humidifier. New. \$15. In the shape of a soccer ball for child's room. 925-648-0671</div></div><div><div><div>MOTORCYCLES</div><div>Yamaha V-Star 1100 custom, \$7,000, 9500 miles, shaft drive, new tires, 209-836-1706</div><div>2004 Honda ST1300, \$8,700. Non-ABS. 3,500 miles. Showroom condition. \$8,700. 209-599-2838</div><div>2006 Kawasaki KLR 650, \$4,800. Dual-sport bike. The bike has 1168 miles on it. 925-321-6741</div><div>Honda dirt bike, \$4,250 OBO. CRF 250X - Perfect condition, barely ridden. 925-337-2875</div><div>Motorcycle. \$450 OBO. '88 Suzuki 305 LTD, "Sportster" style 408-263-2846</div></div><div><div><div>MUSICAL INSTRUMENTS</div><div>Antique piano, \$2,500 OBO. Studio upright. 1903 Chickering in very good condition. 925-634-9973</div><div>Barbie electronic guitar, \$25. Paid \$40 plus tax. New in unopened box. 925-648-0671</div><div>Piano. \$750. Yamaha spinet. Compact &amp; rare 510-653-1017</div></div><div><div><div>PETS</div><div>Ball python,\$80. OBO Very sweet male, 4 years old July 19. 209-239-2639</div><div>Cat needs a good home. Free. Long hair domestic, 4-5 years old, house broken and loving. 209-521-0747</div><div>Cavalier King Charles Spaniel puppies. \$1,000 Male ruby, female black&amp;tan. Ready on 06/29/07. 650-714-1612</div><div>Dog Kennel \$75. 5X5X3.5 In perfect condition great for dogs up to 60 lbs. 925-373-3429</div><div>Female English bulldog, \$700. Beautiful</div></div></div></div></div></div>	<div><div><div>female, AKC, brindle w/little bit of white. 925-813-2597</div><div>Loving CAT free!! Billy is a 1 year old, neutered, house trained LOVEABLE male cat! 209-835-8266</div></div><div><div><div>RECREATION EQUIPMENT</div><div>~40 lb. XVest fitness vest w/ weights \$60. Used by professional and college athletes; 925-413-2595</div><div>New 2007 Burton Titan travel golf cover. \$75 925-829-9443</div><div>Flexiciser for people with a disability. Best offer. 510-653-1017</div><div>Golf club set. Dunlop, women's right-handed. Golf bag and stand. 925-447-3496</div><div>Metolius Boulderering crash pad, \$60. Blue climbing/boulderering pad 925-413-2595</div><div>New Ben Hogan Big Ben putter with magnetic head cover. \$75. Bettinardi. Unique mallet style 925-829-9443</div><div>NordicTrack CXT 980 elliptical trainer. \$300 OBO. With rubber floor mat included. 925-413-2595</div><div>Scuba dive tanks. 2 aluminum. Good condition. You pick up. 925-416-1146</div></div><div><div><div>RIDESHARING</div><div>Wanted: Carpool/vanpool. Roseville/ N. Sacramento area. MTWRF, 7-4 (flexible). 3-3203 or 831-210-3315</div><div>Montclair/Oakland Vanpool. \$150. Leaves at 7 a.m. arrives at LLNL before 7:45 a.m. 925-424-6215</div></div><div><div><div>SHARED HOUSING</div><div>House exchange: Livermore for Kihei, Maui. Available: 8/1/2007 808-283-8239</div><div>Room and private bath in Livermore Home. \$650. Partially furnished room and private bathroom, 925-548-1868</div><div>Room for Rent-Tracy. \$500/mo. This room is equipped with TV, DVD, Internet access, 925-337-3789</div></div><div><div><div>TRAILERS</div><div>2005 Weekend Warrior toy hauler. \$25,000. FS3000, fiberglass gel coat, 2 bay windows 510-566-8404</div><div>2006 Forest River Cherokee 5th wheel. \$23,000. Mid profile, 31.5 feet long. 209-321-1506</div><div>Trailers. \$100 load leveler and sway control 10.000 Lb. 209-747-6334</div></div><div><div><div>TRUCKS</div><div>Ford I50 pick up, \$7,500 XLP, white, excellent condition 925-735-6002</div><div>1986 K5 GMC jimmy, \$5,200 obo, 89,000 miles 4x4 auto with overdrive. Custom grille, 925-487-4974</div><div>2003 GMC Sonoma PU \$9,800 extended cab.V6 Auto, AC, power windows, 925-373-1522</div><div>2002 4X4 Z71 GMC PU \$16,000 OBO Very nice. New tires, custom front grill, 209-832-5462</div><div>Automotive \$4,500 OBO 1995 4x4 Chevy Tahoe, Runs great, good overall condition. 209-740-2506</div><div>Suburban tires and wheels, \$100. For sale or trade for wheels that would fit 72</div></div></div></div></div></div></div></div>	<div><div><div>Chevy truck. 925-373-3429</div><div>Truck 4 sale \$8,000 OBO 2500 1998 Dodge Quad Cab 4x4 manual 5 sp, leather seats, 925-930-7926</div></div><div><div><div>VACATION RENTALS</div><div>Arnold area mountain home. 1600 sq. ft. plus 600 sq. ft. rec. room. 925-245-1114</div><div>Maui, HI. Kahana reef oceanfront 1BR/1BA condo. Beautiful two-island view, 925-449-0761</div><div>Santa Cruz beach house, near harbor. 1 mile from boardwalk. 2 bedr, 2 bath, spa, 925-245-1114</div><div>South Lake Tahoe chalet. Lab rates. 3 bedroom 2 bath chalet, nicely furnished, comfortable, 209-599-4644</div><div>Spacious Kona Hawaii vacation home. Spacious fully-equipped home on the Big Island of Hawaii. 415-377-5361</div><div>Tahoe rental. \$770/week. South Lake Tahoe cabin for rent. Sleeps approx. 8, pets welcome 925-556-9511</div><div>Truckee, Tahoe-Donner Cabin \$125. 3bd/2bth home for daily rent, or long term lease. Pets OK. (925) 858-0419</div><div>Vacation home in Tahoe. \$125. 3b/2b in Tahoma, next to Homewood and near Squaw Valley. 925-813-2597</div><div>Wine country rental, Monte Rio. Country cottage with 3 bedrooms, 1.5 baths, sleeps six very 925-513-4767</div></div><div><div><div>WANTED</div><div>Boat trailer for hauling a 12' to 14' aluminum boat. 925-443-5549</div><div>Coins and stamps. New and old, foreign or United States. 925-422-3794</div><div>Display case . Cheap glass or plastic, Approx. 3'W x 2'D x 6'T, to be used for 14 birds cage. 408-263-2846</div><div>Electrician needed to install 2 ceiling fans and kitchen light. Located in Livermore. 209-604-1025</div><div>Kid's bike seat that mounts to the back of an adult bicycle. Needs to hold up to 40 pounds. 925-456-5681</div><div>Oars. Someone who wants a free set of oars and oarlocks for a small skiff 209-403-1854</div><div>Proposed LLESA group. Are you a pilot? Do you want to learn to fly? 925-323-8223</div><div>Rooftop cargo carrier that you are not using. 925-454-1478</div><div>Soccer equipment. New soccer coach looking for practice equipment, drills and practice goals. 925-828-5331</div><div>Used Toyota or Honda. \$5,000. A reasonably priced used 95 or newer with an average of 100,000 miles. 925-672-2716</div><div>Poisonwood Bible books. Looking for good used copies of Barbara Kingsolver's book for Livermore High School 11th grade AP English summer reading. 925-455-4666</div><div>Old PCIVGA video cards. These will be used in DOS applications 925-961-0696</div></div></div></div></div>
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## ES&H Fair features lunch and learning by the lake

PHOTO BY JACQUELINE MCBRIDE

The Lab's annual ES&H Fair was a hit Thursday as employees enjoyed pleasant temperatures, gentle breezes and a wide-variety of displays along the south side of Lake Haussmann.

"Living Safely — Working Safely" was this year's theme with almost 70 exhibitors from within the Lab as well as outside organizations highlighting topics that ranged from traffic safety and wild life to health awareness. Vendors answered questions, engaged in discussions and offered giveaways. Food was on sale and live entertainment was provided.

The LLNL Grassroots Safety Collaboration sponsored the fair, which coincides with June as National Safety Month. The collaboration is made up of safety organizations from across the site, which have banded together voluntarily to promote safety Labwide.



JACQUELINE MCBRIDE/NEWSLINE

Richard Hartley operates the new computer-aided dispatch system.

## Seamless transition to new Alameda County computer-aided dispatch system

By David Schwoegler  
Newsline staff writer

Quiet as a tulle fog and seamless as a lute of polished plate glass, the on-site Alameda County Regional Emergency Communications Center recently switched to a new computer-aided dispatch or CAD system last month.

Created by the Intergraph Corporation, a 35-year veteran provider of software and services, the new system replaces a 12-year old text-based arrangement that had limited flexibility. According to Center Dispatch Manager Chuck Berdan: "The conversion marks the culmination of two year's efforts by the staffs from the center, along with those of member fire departments."

Berdan explained that by using contemporary software solutions, the computer-aided dispatch serves as the core of the decision support process. The system can address the diverse geography and demographics of Alameda County by seamlessly combining an interactive, real-time map display with call handling, dispatching, records and information management, remote access and mobile data.

Berdan said the key business benefits of the new system are reduced response times and real-time information that is available to both the dispatcher at the center and to firefighters in the field. Dispatcher effort is reduced because many elements are now available at the click of a mouse.

"Conserving resources in this way allows all dispatchers to work more efficiently than before," he said. This is brought about by the increased efficiency of a Windows environment, and by the ready access to timely, accurate and secure information from a variety of sources, Berdan said.

Located in Bldg 313, the center dispatches for a consortium of public safety agencies within Alameda County. Those include Lab Fire, Alameda County Fire Department, Lawrence Berkeley National Laboratory, City of Alameda Fire Department, Alameda County Emergency Medical Services Agency, Camp Parks Combat Support Training Center, Fremont Fire Department and the Union City Fire Department.

The \$1.2 million project was funded jointly by all members of the consortium, which allows the Laboratory to enjoy the benefits of a larger organization's resources and funding to maximize the safety of all LLNL employees, as well as playing a vital role as a community partner in Alameda County. The Laboratory manages ACRECC under a mutual aid agreement with the other agencies.



JACQUELINE MCBRIDE/NEWSLINE

Orbit, a border collie mix trailing dog from the Alameda County Search and Rescue, demonstrates techniques of ladder climbing with handler Judy Loos.

## NEWSLINE

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## LLNL'S WILDSIDE



By Karen Jensen

# The secret life of the Valley Elderberry Longhorn Beetle

It is a warm spring day. The elderberries (*Sambucus sp.*) along a stream sway with the breeze. One of these shrubs has a few small holes in its trunk, each one about the diameter of a pencil. Out of one of these holes crawls a beautiful, red and black beetle with long antennae. It takes a look around, cleans its antennae, and then crawls away to nibble on some fresh, green elderberry leaves. This is a newly emerged adult valley elderberry longhorn beetle (*Desmoceros californicus dimorphus*), otherwise known as the VELB.

Until recently, the VELB was only known from riparian areas that include elderberries (Figure 1) as a component from California's Central Valley. In 1980, the VELB was federally listed as a threatened species under the Endangered Species Act, due to the loss and alteration of its riparian habitat and because it naturally occurs at low population densities. More than 90 percent of riparian habitat in the Central Valley has been lost to agricultural and urban development. The remaining habitat is fragmented.

The VELB is a member of the longhorn beetle family (*Cerambycidae*). Adults are about 3/4 inch (2 centimeters) in length. Females are larger than their male counterparts, but males have longer and more robust antennae (Figure 2). Both sexes usually have a bright red color on their wings. The forewings of females are dark metallic green with bright red trimmings. In males, the forewings can be similar in color to the female's, or red and black with dark green spots.

The life history characteristics of the VELB are somewhat secretive and little known. However, it is assumed theirs is similar to the life histories of other closely related longhorn beetles. Adult VELB live for several weeks between the months of March and June, timed with the flowering of the elderberry plants. They dine on the leaves and possibly the flowers of the elderberry until it is time to mate. Females will deposit their fertilized eggs (Figure 3) in crevices of the elderberry bark. Eggs hatch a few days later and the larvae (Figure 4) bore into the pith of the plant's trunk, stem or roots.

The larvae complete their development in one to two years, all the while remaining inside the trunk, large branches, or roots of the elderberry



**Background:** An elderberry, host plant for the VELB. Credit: Karen Jensen

**Inset, from left:**

**An adult male VELB.** Credit: Richard Arnold

**A deposited VELB egg.** Credit: U.S. Forest Service

**A VELB larva moving through an elderberry branch.** Credit: U.S. Forest Service

**VELB pupae undergoing waiting for metamorphosis.** Credit: U.S. Forest Service

plant. They subsist on the pith of the elderberry during this period. At the end of this stage, the larvae chew an exit hole in the trunk of the host plant. Sealing the hole with a mixture of wood shavings and beetle droppings called frass, they retreat into the plant where they pupate (Figure 5) and go through metamorphosis. Once metamorphosis is complete, the adult emerges through the exit hole to start life on the outside.

Since most of VELB's life occurs within the elderberry plant, surveys for them tend to focus on searching for elderberries, the exit holes on the trunks, along with searches for adult VELB. During a 2002 survey at Site 300, six adult VELB and 16 exit holes were observed and recorded. Though the numbers may seem small, this information represents a range extension for the VELB, heightening this population's importance to the species recovery especially in the context of California's continued development and altering of riparian areas.



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